



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/011,977	06/15/1998	HERMANN P.T. AMMON	015200-054	1580

21839 7590 04/17/2002

BURNS DOANE SWECKER & MATHIS L L P  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

OWENS JR, HOWARD V

ART UNIT	PAPER NUMBER
----------	--------------

1623

DATE MAILED: 04/17/2002

26

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/011,977

Applicant(s)

AMMON ET AL.

Examiner

Howard V Owens

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10,12-22,24,25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10,12-22,24,25 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 26.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Response to Arguments

The following is in response to the amendment filed 1/14/02:

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

An action on the merits of claims 10, 12-22, 24 and 25 is contained herein below.

**35 U.S.C. 103**

The rejection of claims 10, 12-22, 24-25 and newly added 27 under 35 U.S.C. 103 is maintained for the reasons of record.

Claims 10, 12-22 and 24-25 and 27 are rejected under 35 U.S.C. 103 over Ammon et al., EP 0552657 in combination with Mulshine et al., WO 95/24894 and Han, Chin. Med. Sci. J., vol. 9(1), 61-69

The instant claims are drawn to a method of combating diseases selected from the group consisting of chronic bronchitis, glomerulonephritis, rheumatoid arthritis, cystic fibrosis, tumors and neoplasms or tumor metastases which are caused by increased leukocytic elastase or plasmin activity.

The prior art of Ammon et al. has recognized the use of Boswellic acids for the prophylaxis and or control of inflammatory processes that are caused by elevated leucotriene formation and that they inhibit the 5-lipoxygenases. Ammon et al. teach the use of Boswellic acid in the treatment of inflammatory conditions of the joints (rheumatism), bronchitis, chronic hepatitis and chronic asthma (pp. 1-6). Applicant's arguments regarding and whether the mechanism of action by Boswellic acid is dependent upon 5-lipoxygenase inhibition or the concentration of 5-lipoxygenase inhibitors is moot. The prior art has recognized the use of these compounds to treat the same conditions as applicant; therefore, there is no novelty to the invention. However, Ammon does not teach the use of Boswellic acid as an anti-tumor or anticancer agent. Mulshine et al. teaches the efficacy of 5-lipoxygenase inhibitors in the treatment

Art Unit: 1623

and the invention as claimed with regard to the use of Boswellic acids to treat tumors; moreover, Han further supports the usefulness of Boswellic acid derivatives in the treatment of cancer (see abstract).

It would have been prima facie obvious to a person of ordinary skill in the art at the time the invention was made to use Boswellic acid or a derivative thereof to treat inflammatory processes or neoplasms.

One of skill in the art would have been motivated to use Boswellic acid or plant extracts (such as olibanum) containing Boswellic acid to treat inflammation or neoplasms as the prior art teaches the anti-inflammatory and anticancer activity associated with the use of these compounds. Applicant's connection of Boswellic acid to leukocytic elastase or plasmin activity is considered to be a discovery of one of the pathways affected by Boswellic acid and does not obviate the use of the Boswellic acid in the prior art to treat or combat inflammatory conditions, neoplasms or cancer; moreover, as the prior art has taught the efficacy of 5 lipoxygenase inhibitors in the treatment of cancer or tumors and Boswellic acid has been established in the art as a member of the class of lipoxygenase inhibitors one of skill in the art would have been provided with a reasonable expectation of success in the use of these compounds to treat cancer.

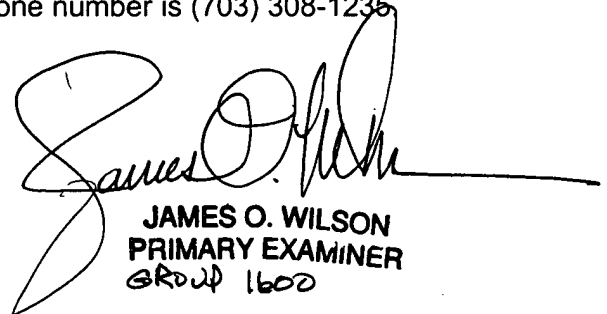
Applicant argues that the prior art had only indicated the use of 5 lipoxygenase inhibitors, such as boswellic acids for the treatment of moderate diseases, such as asthma, and not those of the present invention. However, as cited previously, Ammon et al. teach the use of Boswellic acid in the treatment of inflammatory conditions of the joints (rheumatism), bronchitis and chronic hepatitis which are the same diseases that applicant claims in claim 10. In the specification, applicants have admitted that the prior art has recognized the ability of the pentacyclic triterpene class of compounds, of which Boswellic acid is a member, (p. 3, lines 14-21) to inhibit human leucocytic elastase (HLE). Although, boswellic acid was not mentioned, one of skill in the art would have a reasonable expectation of success in the use of boswellic acid as an inhibitor of HLE from the multitude of pentacyclic triterpenes since it has been indicated in the prior art as being useful for the same disease conditions associated with HLE, such as rheumatism, bronchitis and chronic hepatitis.

Art Unit: 1623

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Owens whose telephone number is (703) 306-4538 . The examiner can normally be reached on Mon.-Fri. from 8:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the Primary Examiner signing this action, James O. Wilson can be reached on (703) 308-4624 . The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.



**JAMES O. WILSON**  
**PRIMARY EXAMINER**  
**GROUP 1600**